UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/351,086	07/09/1999	NEVENKA DIMITROVA	PHA-23.716	9235

24737 7590 02/20/2007

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER	
BUI, KIEU OANH T	
ART UNIT	PAPER NUMBER
2623	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/351,086	DIMITROVA, NEVENKA	
	Examiner	Art Unit	
	KIEU-OANH BUI	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-20,26 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-2,4-20,26-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remark

1. Claims 3, and 21-25 have been previously cancelled, and claims 26-27 have been previously added; pending claims 1-2, 4-20, and 26-27 are for reconsideration.

Response to Arguments

2. Applicant's arguments filed on 11/24/2006 have been fully considered but they are not persuasive.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "feature" which the applicant argues that it's different from prior arts but not specially pointed out what is the difference) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both references are in the same field of endeavor of having video delivery and/or sequences of video segments with video related segments to the user; and which corresponding related segments would be sent to the main video segment obviously based on some predetermined features or parameters (motivation) and Nagasaka teaches a feature being extracted from one or more frame sequences and then linking the feature to an additional information as taught by Hjelsvold (refer back to claim 1).

Claim Rejections - 35 USC 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

4. Claims 1-2, 4-10, 17-20, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hjelsvold et al. (U.S. Patent No. 6,546,555 B1) in view of Nagasaka et al. (U.S. Patent 6,400,890 B1).

Regarding claim 1, Hjelsvold discloses "a method for processing video, the method comprising: displaying a sequence of video segments at a display of a user, determining an association between a first video segment including a particular feature and at least one additional information source also including that feature; and utilizing the association to display information from the additional information source based at least in part on a selection by a user of the feature in the first video segment while one or more video segment are displayed to the user", i.e., one or more video segments are delivering and displaying to the viewer, while viewing the programming segment with a particular feature, the viewer further access to related information to that feature from an additional information source of a vendor for that particular product or service based on the defined association between the video segment and related information sequences (Figs. 16-18, and col. 2/line 58 to col. 3/line 32 for hypervideo to link to additional information related to a feature of a product or a service; and col. 11/line 16 to col. 12/line 10 for further details on the determination of association between parameter values and hyperlink and hypervideo).

Hjelsvold does not clearly suggest the step of "extracting a feature from one or more video segments of the sequence" and then "defining a link between the feature and the at least one additional information source to facilitate a display of information" (as pre-amended); however, Nagasaka teaches a same technique of extracting a feature from one or more video frame sequences, and similar features can be stored, indexed, and searched as additional

information related to the feature(s) can be defined (Nagasaka, Figs. 2, 9, 10A-10B, 15 & 16, and col. 2/lines 27-60 for details on additional information related to the extracted features from one or more video sequences are defined, associated them to each other for searching, retrieving, and displaying to the user; and col. 4/line 57 to col. 5/line 32 for a frame feature extractor; and Fig. 19 and col. 15/line 40 to col. 16/line 34 for similar features are gathered, defined and associated from features being extracted from one or more video sequences). Therefore, it would have been obvious to one of ordinary skill in the art to modify Hjelsvold's system with Nagasaka's teaching technique of feature extraction as noted in order to provide the user a sequence of video segments, extracting a feature from one or more video segments, defining a link between the feature and the at least one additional information related to the feature as preferred.

As for claim 2, in view of claim 1, Hjelsvold and Nagasaka discloses "wherein defining the link includes retrieving the link from a memory based on an identification of the feature" (Hjelsvold, Fig. 1, for the server 10 retrieves the meta-data from a database for filtering based on related features as explained earlier; and Nagasaka, Fig. 3 for features with identification).

(Claim 3 has been cancelled).

As for claim 4, in view of claim 1, Hjelsvold further discloses "wherein the additional information source includes an additional video segment that also includes the feature" (as already discussed in claim 1).

As for claims 5 and 6, in view of claim 4, Hjelsvold discloses "switching from display of the first video segment to display of the additional video segment" (as shown in Figs. 16-18, for the display of the next screen including the video feature of the feature of a product or service); and Hjelsvold further discloses "displaying the additional video segment at least in part in a

separate portion of a display which also includes at least a portion of the one or more video segment" (Figs. 17-18, and col. 12/lines 1-33).

As for claim 7, in view of claim 1, Hjelsvold further discloses "wherein the feature includes a video feature", i.e., the selected target is at least one frame of the video segment as a window frame of image (Fig. 17 and col. 12/line 1-33 clearly show the next additional information is extracted from at least one frame of the video sequences, as discussed earlier in Figs. 4-5 for the building of an association between parameter values for video sequences within the filtering process).

As for claim 8, in view of claim 7, Hjelsvold discloses "wherein the video feature includes at least one of a frame characterization, a face identification, a scene identification, an event identification, and an object identification" (Figs. 14, and 16-18 for these features).

As for claims 9 and 10, in view of claim 1, Hjelsvold further discloses "wherein the feature includes an audio feature" and "including combining an audio signal corresponding to the audio feature with an audio signal associated with the first video segment", i.e., as the user selects a desired target, the video segment including audio tracks related to the selected portion of feature is provided (col. 4/lines 51-64 for multimedia includes video, audio tracks and other objects).

As for claim 17, in view of claim 1, Hjelsvold and Nagasaka do not discloses "wherein determining the association includes determining a similarity measure and a clustering technique"; however, this limitation is admitted as prior art by the Applicant (page 9, line 19 to page 10/line 13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hjelsvold' technique with a known prior art using

similarity measure and a clustering technique for determining the association or the relationship in the determining step of claim 1, for the purpose of providing same information to a group of users with similarity interests on a certain product or service as preferred.

As for claims 18-20, these claims with same limitations are rejected for the reasons given in the scope of claim 1 above in view of Hjelsvold and Nagasaka as already discussed in details above, to avoid unnecessary repetitions herein.

As for claims 26-27, Hjelsvold teaches these features of storing the link and combining the link and the video segment to create a hyperlinked video segment (Fig. 1, and refer again to claims 1-2 and claims 7-9).

5. Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hjelsvold et al. (U.S. Patent No. 6,546,555 B1) in view of Nagasaka (US Patent 6,400,890 B1) and Jain et al. (U.S. Patent No. 6,463,444 B1).

Regarding claim 11, in view of claim 9, Hjelsvold and Nagasaka do not further disclose "converting an audio signal corresponding to the audio feature into a textual format that is displayed with the first video segment"; however, such a technique of converting audio signal to a textual format or speech-to-text feature is known in the art. In fact, Jain, in a video cataloger system for providing video/audio information data to the user, teaches to use a closed caption decoder (Fig. 3) or speech-to-text converting technique for providing a textual format to display with the video to the user (Fig. 9, item 518, and col. 9/line 45 to col. 10/line 38 for audio feature extractors, and col. 20/lines 45-48 for speech-to-text). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hjelsvold and

Nagasaka's system with Jain's teaching technique as disclosed in order to provide an additional feature such as a textual format in additional to the display of video presentation. This technique is helpful for some people have difficulty in hearing, so that they can read the texts on the display screen instead, which serves also as a motivation for modifying Hjelsvold regarding this limitation.

As for claim 12, in view of claims 9 and 11 above, Jain further including "separating at least a portion of the video segment into audio categories including one or more of single-voice speech, multiple voice speech, music, silence and noise in order to extract the audio feature therefrom" (see Fig. 6 and col. 9/line 45 to col. 10/line 38 for a monitoring screen for separating a portion of video segment into audio categories and audio feature extractors as addressed).

As for claim 13, in view of claims 9 and 11 above, Jain teaches "wherein the audio feature includes at least one of a music signature extraction, a speaker identification, and a transcript extraction", i.e., music, and/or speaker ID, signatures or sample speeches of individual speaker or transcripts from the speaker are within audio feature addressed (see col. 9/line 18-col. 10/line 38).

As for claim 14, in view of claim 1, the combination of Hjelsvold and Jain teaches "wherein the feature is a textual feature", i.e., applied Jain's technique of textual feature extracted, the at least one frame of the video segment as discussed earlier of Hjelsvold would contain the textual feature (see claims 1, 7 and 11).

As for claim 15, in view of claim 14, Jain further discloses "displaying information corresponding to the textual information as an overlay on a display of the first video segment" (as illustrated in Fig. 17, and col. 14/lines 15-63).

As for claim 16, in view of claims 1 and 14, Jain further teaches "the feature includes at least one multi-dimensional feature vector extracted from a portion of the video segment using a feature extraction technique" (Fig. 14, and col. 12/lines 20-46 for feature extraction technique addressed).

Conclusion

6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to PTO New Central Fax number:

(571) 273-8300, (for Technology Center 2600 only)

Hand deliveries must be made to Customer Service Window,

Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (571) 272-7291. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller, can be reached at (571) 272-7353.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kieu-Oanh Bui
Primary Examiner
Art Unit 2623

KB
Feb.05, 2007